

TAITO CORPORATION



SERVICE INSTRUCTIONS

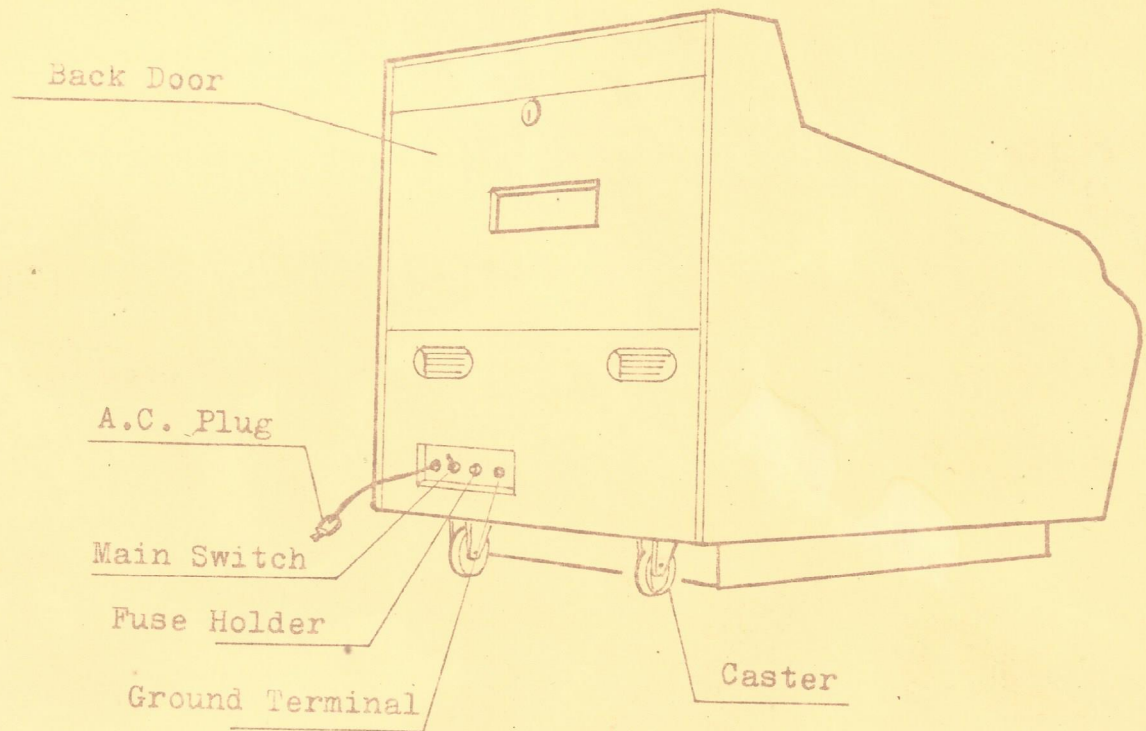
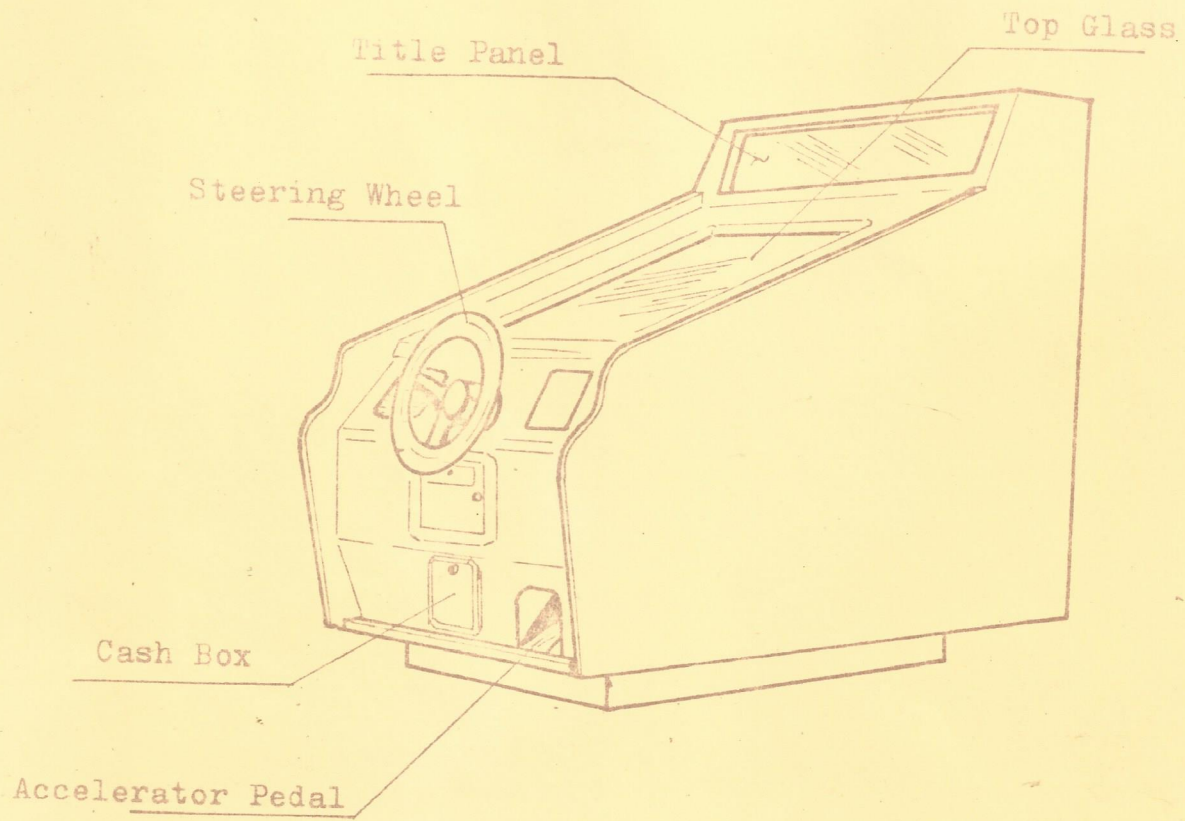


TAITO CORPORATION

TAITO CORPORATION, 1-1-1, HONJO, SHIBUYA-KU, TOKYO, JAPAN

85-720001

o Name of Part





## 1. Transportation and Installation

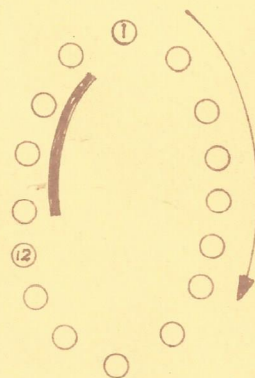
- o Avoid rough handling during transportation; the picture tube is fragile.
- o Avoid installation in location with exposure to direct sunlight or excessive heat to avoid damage from high internal temperatures.
- o Connect ground terminal and A.C. plug prior to switching on.

### Note:-

- o Erroneous or partial scores may appear when the machine is first switched on. This is typical of solid-state circuitry and will correct itself automatically when the first game is started.
- o A slight flicker between adjacent line in the car is normal.
- o TAITO SPEED RACE uses the latest solid-state circuitry for long life, however, as with all sophisticated electronic equipment certain precautions must be observe to prevent damage:
  - (1) Do not attempt to service with ordinary test equipment.
  - (2) Assure proper ventilation. Do not expose to temperatures above 60° C.
  - (3) Do not attempt to change pricing as the credit board is pre-programmed.
  - (4) Do not connect or disconnect any internal receptacles without first switching off the power.

## 2. Playing Instructions

- \* One or two player game.  
(One coin-one game, Two coins-two games)
- \* When one coin is inserted, the 1st PLAYER lamp is turned on, and your car appears on the screen.
- \* Accelerate your car to pass your competing cars, when scoring is made under the 1st PLAYER lamp on the title panel.
- \* When crashed with competing cars, your car disappears from the screen with roar of collision. After a little while, the game resumes.
- \* Playing time is indicated by 16 pieces of the light emitted diodes located on the cabinet adjacent to the screen. At the time of the game start, the top light emitted diode is turned on. Then, the other light emitted diodes will be turned on one by one in the order of clockwise rotation.
- \* When the scoring not reaches 400 points, the game is over after the 12th light emitted diode is turned on. When the scoring reaches 400 points or more, the game is extended until the 16th light emitted diode is turned on.
- \* When the game is over, the GAME-OVER lamp located upper side of the light emitted diodes is turned on.
- \* You can choose the advanced player's race with pushing the advanced player's button located on the cabinet near to the playing instructions plate.
- \* When two coins are inserted, two games can be played. In this case, the red lamp adjacent to the coin entry will be turned on after the first game is over. Then, push the button located upper side of the red lamp and the second game begins. Scoring for the second game is made under the second PLAYER lamp on the title panel.



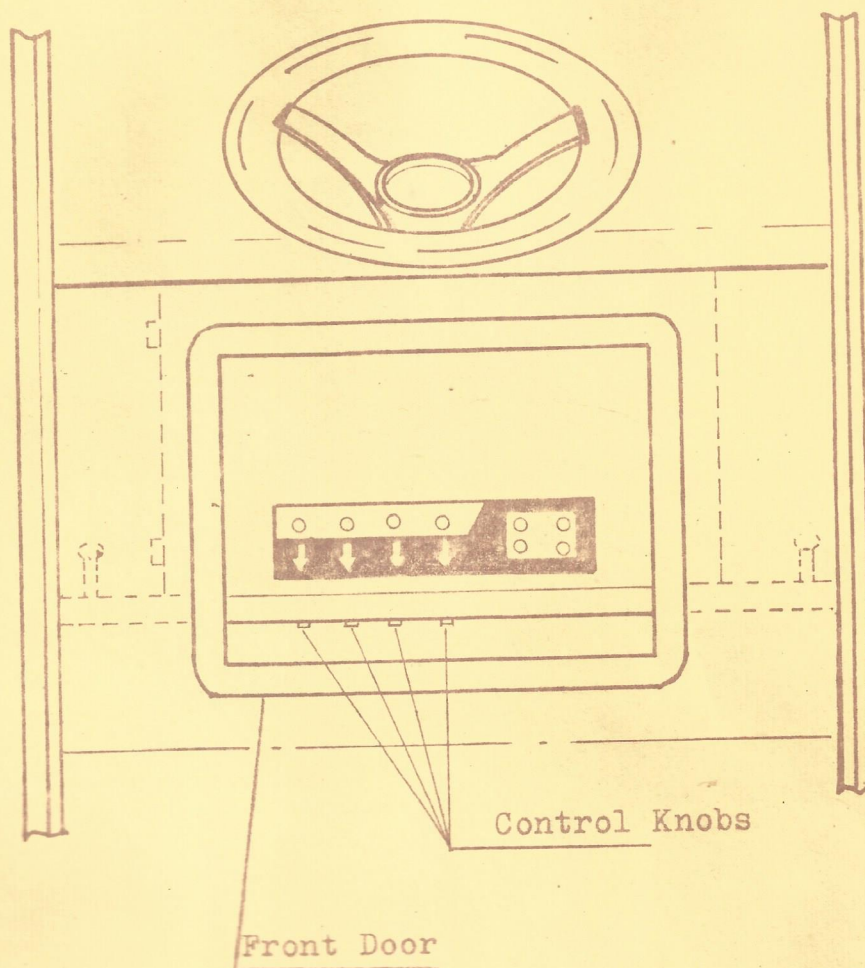
## 3. Action of the credit circuit

The credit circuit of Taito SPEED RACE works as follows;

- (1) Serving 1 play against inserting 1 coin for 1 play.  
Serving 2 plays against inserting 2 coins for 2 plays.  
(Push the button after the first game is over, and the second game begins.)
- (2) After inserting coin, the game begins.
- (3) This credit circuit includes the circuit to operate the play counter meter.



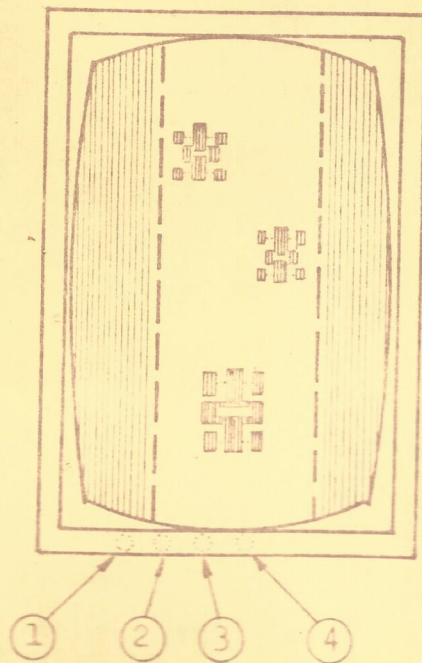
#### 4. Adjustment for TV monitor



Sound volume, screen brightness, screen contrast and vertical hold of the TV monitor can be adjusted by turning the control knobs which are located within your reach from the front door shown above.

### Adjustment for TV monitor (front)

- o TV monitor is adjusted before shipping, however, if necessary, readjust the controls as follows:-



- ① V. HOLD. (Vertical Hold Control)
- ② BRIGHT (Brightness Control)
- ③ CONT. (Screen Contrast Control)
- ④ VOLUME (Sound Volume Control)

- o Adjustment for sound volume

Adjust the control (4) so as to match the sound with the location.

- o Adjustment for screen brightness

Adjust the control (2) so that the field of the screen is dark. The brightness depends on the situation of the location, however, increase of the brightness causes many scanning lines to appear on the screen.

- o Adjustment for screen contrast

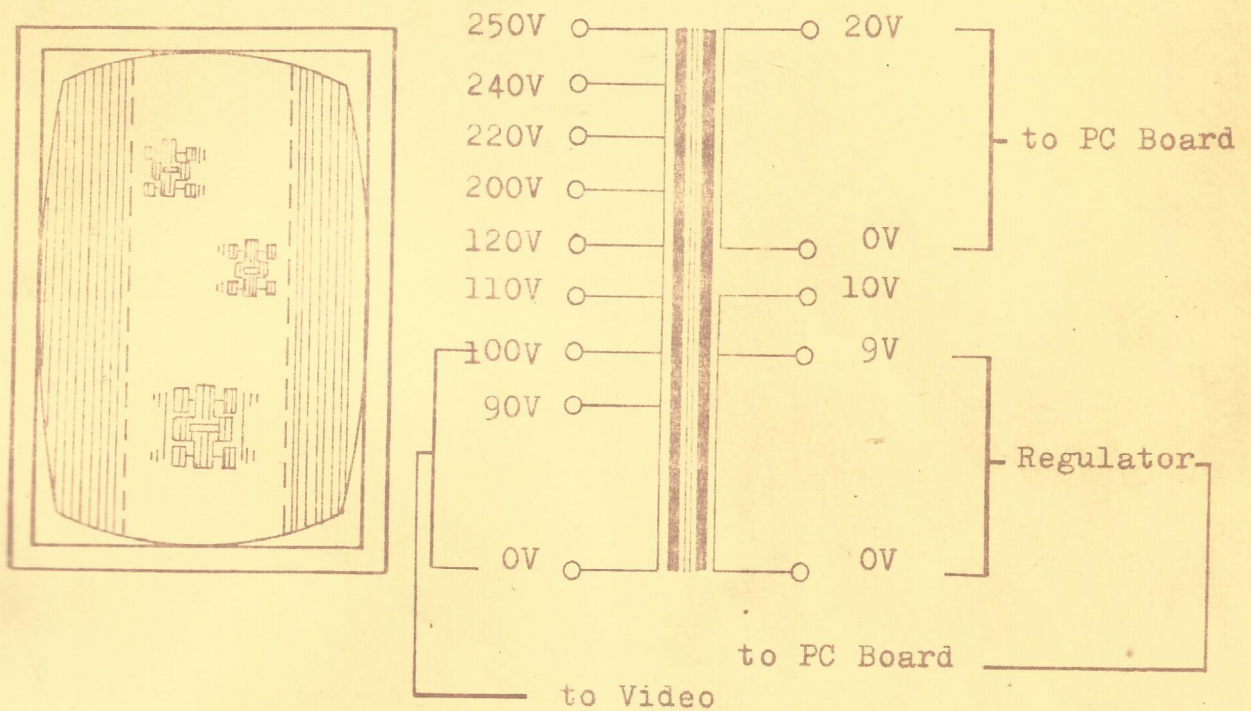
When the contrast is intensified, the lower side of the car images will be distorted. Therefore, adjust the control (3) so as to keep the car images clear.



o Adjustment for the car image shape

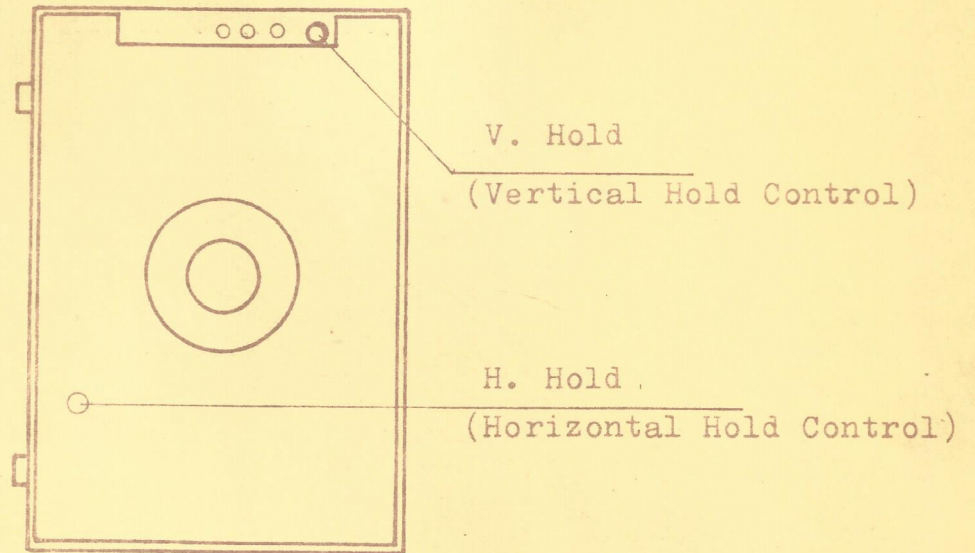
When the voltage of the power source is low, the car images on the screen sometimes flicker. In such case, the vertical width of the screen is also shruken.

Adjustment: Change the terminal of the power transformer in the cabinet according to the supply voltage.

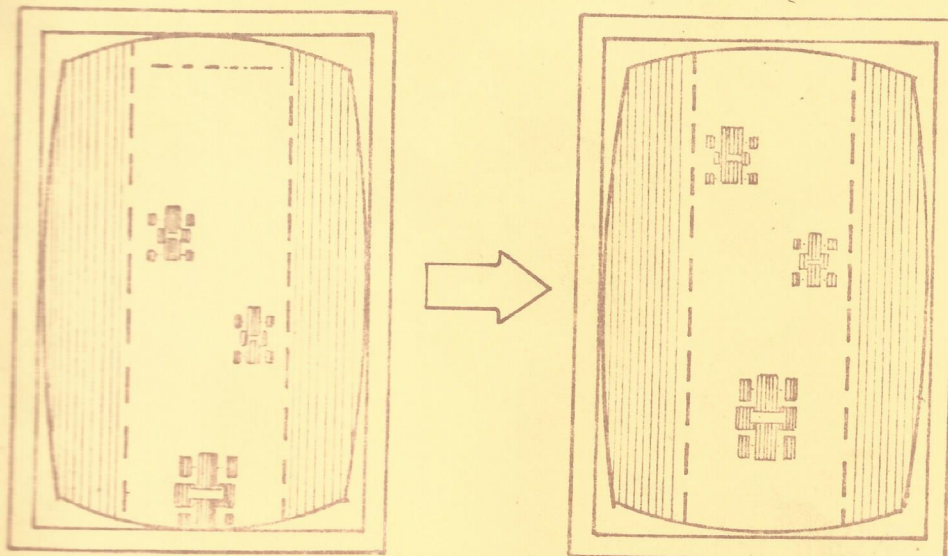


Adjustment for TV monitor (back)

- o When the picture on the screen rolls vertically or oblique lines appear on the screen, adjust it by turning the control knobs as follows:-



- o When the picture on the screen rolls vertically, adjust it by turning the V. Hold control knob so that the picture roll stops on the screen correctly.
- o When oblique lines appear on the screen, adjust it by turning the H. Hold control knob so that the course is located in the middle of the screen.

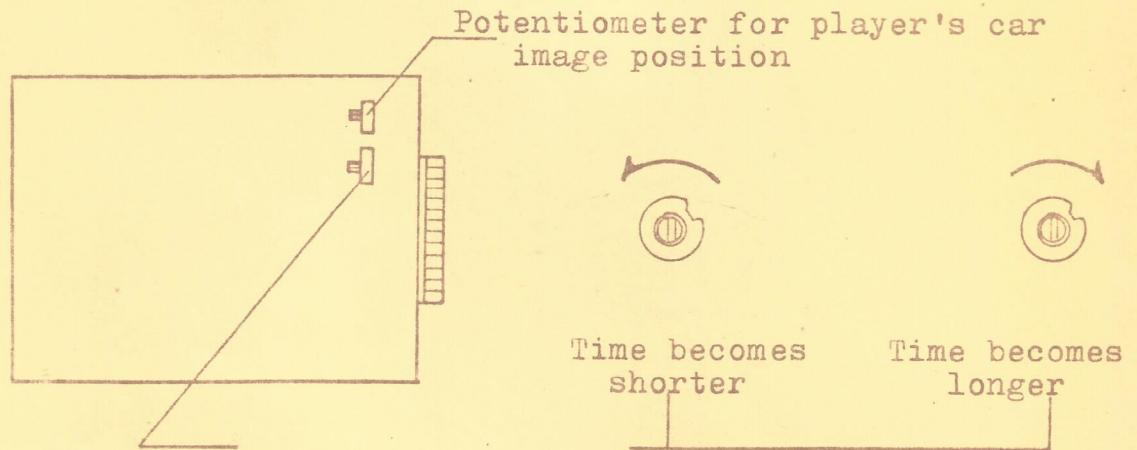




### Adjustment for playing time

- o The playing time is adjustable.

For this adjustment, turn the potentiometer on the solid-state module as shown the sketch below.



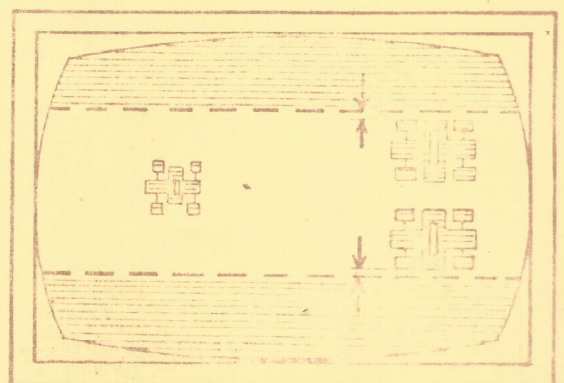
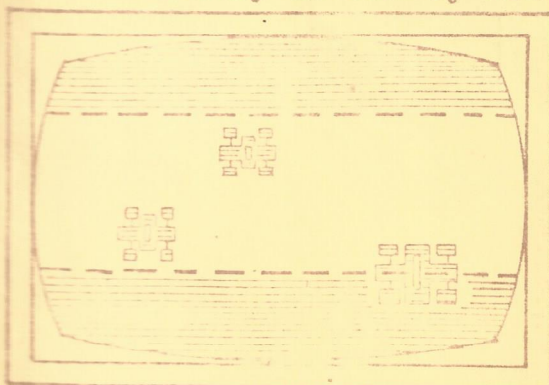
Potentiometer for playing time adjustment

### Adjustment for player's car image position

- o Usually no adjustment for player's car image position is required since it has been made at the factory. However, in case that the solid-state module was replaced in some reasons, readjust the player's car image position as follows:-

If the player's car image does not shift correctly in the course of the screen as shown the sketch (A) below, when the steering wheel is turned fully in either direction, keep on turning the steering wheel to the left (counter-clockwise) in full, then adjust the potentiometer (on the solid-state module) for player's car image position so that the player's car image is located as shown in the following sketch (B).

Note: Turning of the potentiometer should be done very slowly little by little.





## Steering Wheel Mechanism

- o A potentiometer is mounted on the one end of the steering wheel shaft as shown in the sketch below. This potentiometer activates the movement of the player's car, which is larger than the other cars, on the screen, when the steering wheel is turned during playing.

For protection of overrunning of the potentiometer, a leather clutch as well as a stopper mechanism are installed in the mounting position of the potentiometer.

- o Replacement of the potentiometer.

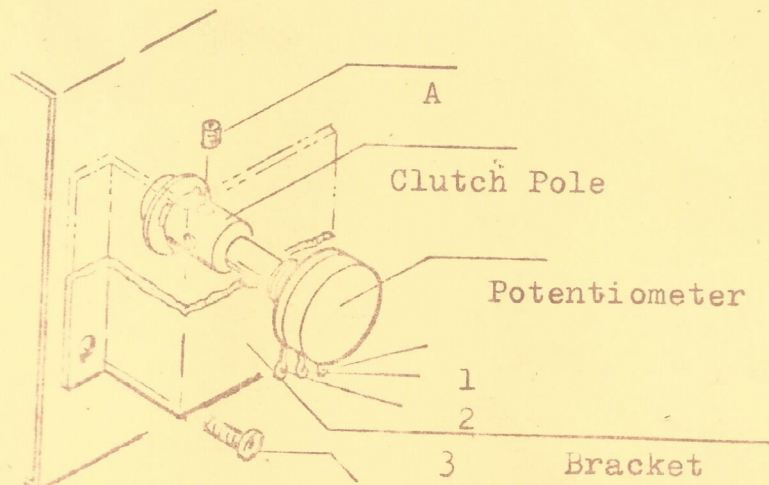
This potentiometer has a long life. However, if the movement of the player's car on the screen does not run as it should, replace the potentiometer as follows. (See the sketch below)

- (1) Take off the wiring of the potentiometer.
- (2) Loosen the two screws maked (A) in the sketch below.
- (3) Remove the two screws maked (B) in the sketch below, and take off the bracket.
- (4) Take off the potentiometer out of the bracket.
- (5) Mount a new potentiometer on the bracket.
- (6) When the potentiometer is mounted on the steering wheel shaft, it is required to adjust the position of the stopper mechanism as follows:

Turn the potentiometer shaft to the right (viewing from the shaft side) in full, then, return it slightly to the left. Turn the steering wheel shaft to the left (viewing from the shaft side) in full.

Insert the potentiometer shaft into the steering wheel shaft by adjusting the eccentricity of the both shafts, then, screw up the bracket with the screws maked (B) in the sketch below.●

- (7) Screw up the potentiometer with the screws maked (A) in the scketch below.
- (8) Solder the wiring of the potentiometer.  
(Wiring color: (1) - black, (2) - yellow, (3) - red)





## Accelerator Pedal Mechanism

A micro switch is mounted inside of the accelerator pedal. The player's car on the screen starts by stepping on the accelerator pedal and switching on the micro switch. The player's car accelerates by keeping a player's foot on the accelerator pedal. A speed of the player's car on the screen is reduced by stepping off the accelerator pedal and switching off the micro switch.

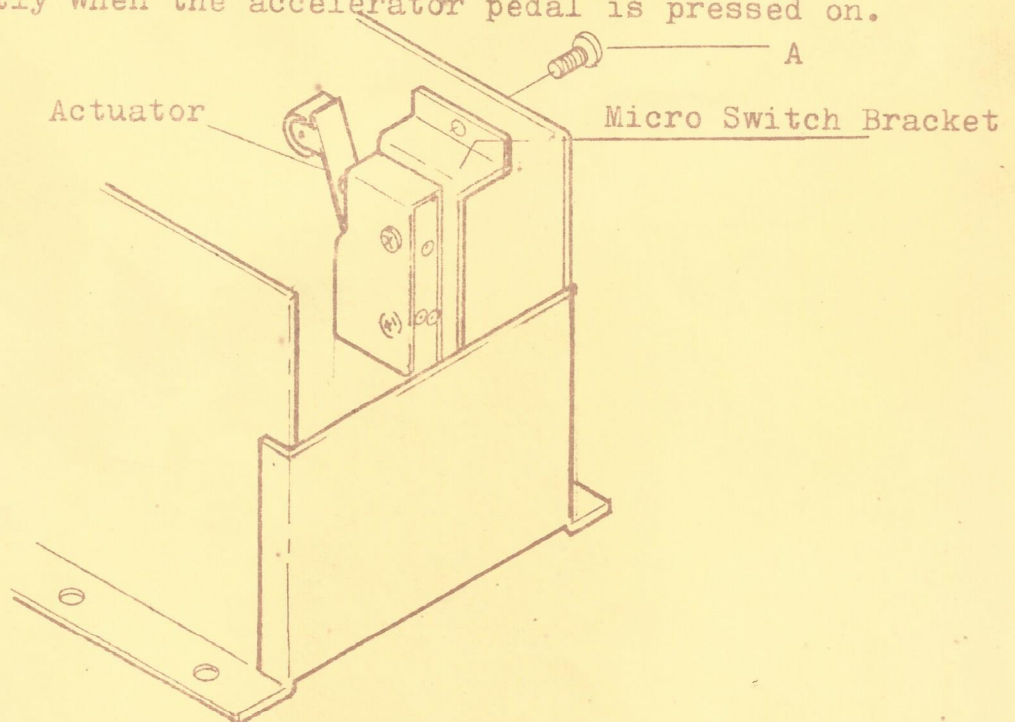
This micro switch will be turned on, when the accelerator pedal is pressed down to the position about 10 degree upper than its full-pressed position.

### o Replacement of the micro switch.

Check the micro switch in the cases the player's car keeps running or stopping during playing. Then, the micro switch may be out of order.

If the micro switch does not work, replacement job is required as follows:-

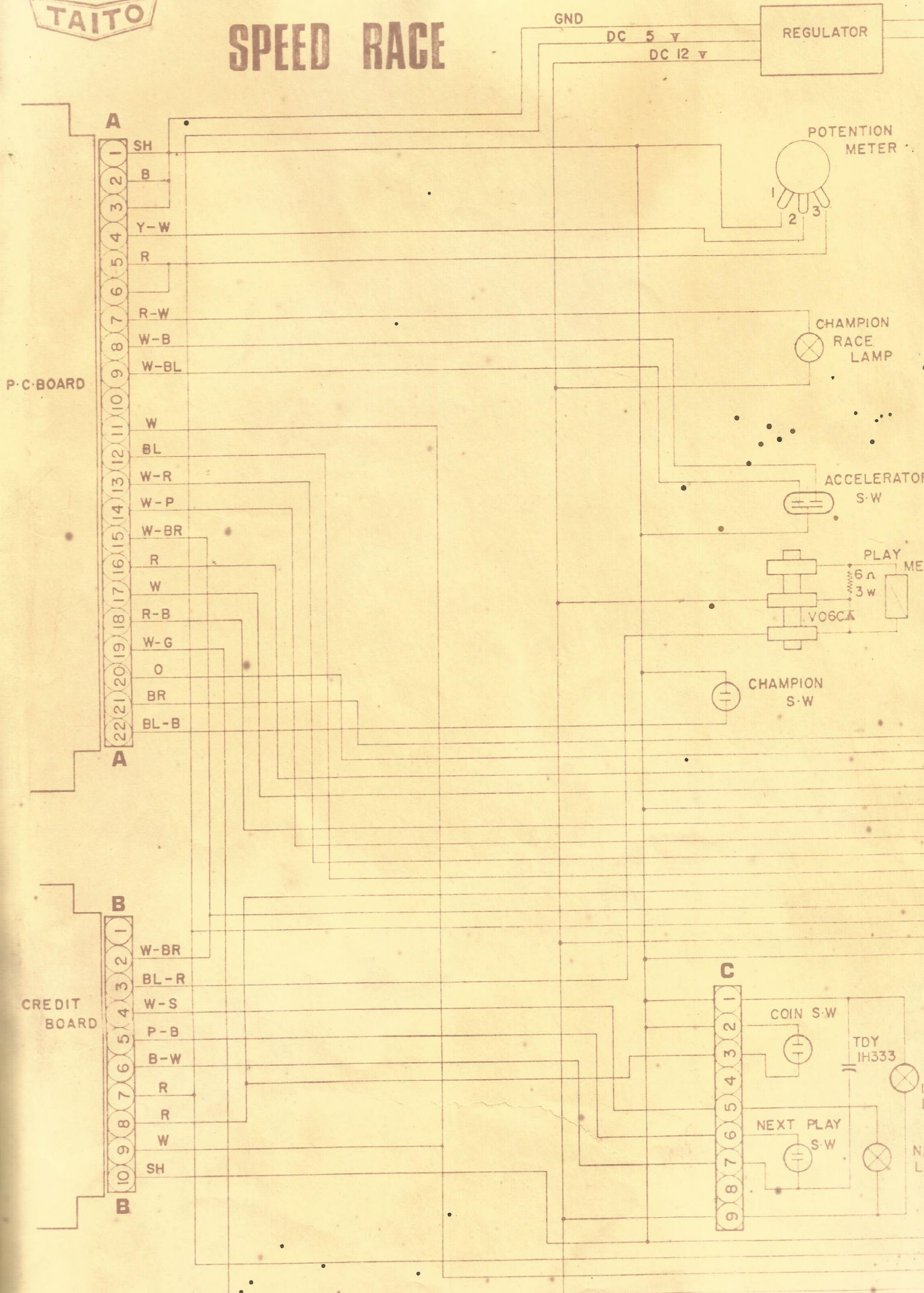
- (1) Remove the screw marked (A) in the sketch below, and take off the micro switch bracket.
- (2) Take off the wiring of the micro switch, and replace the micro switch with the new one. The screw will be positioned and tightened in the center of the hole.
- (3) Solder the wiring of the micro switch.
- (4) Mount the bracket and screw up.
- (5) Adjust the micro switch so that the micro switch works correctly when the accelerator pedal is pressed on.



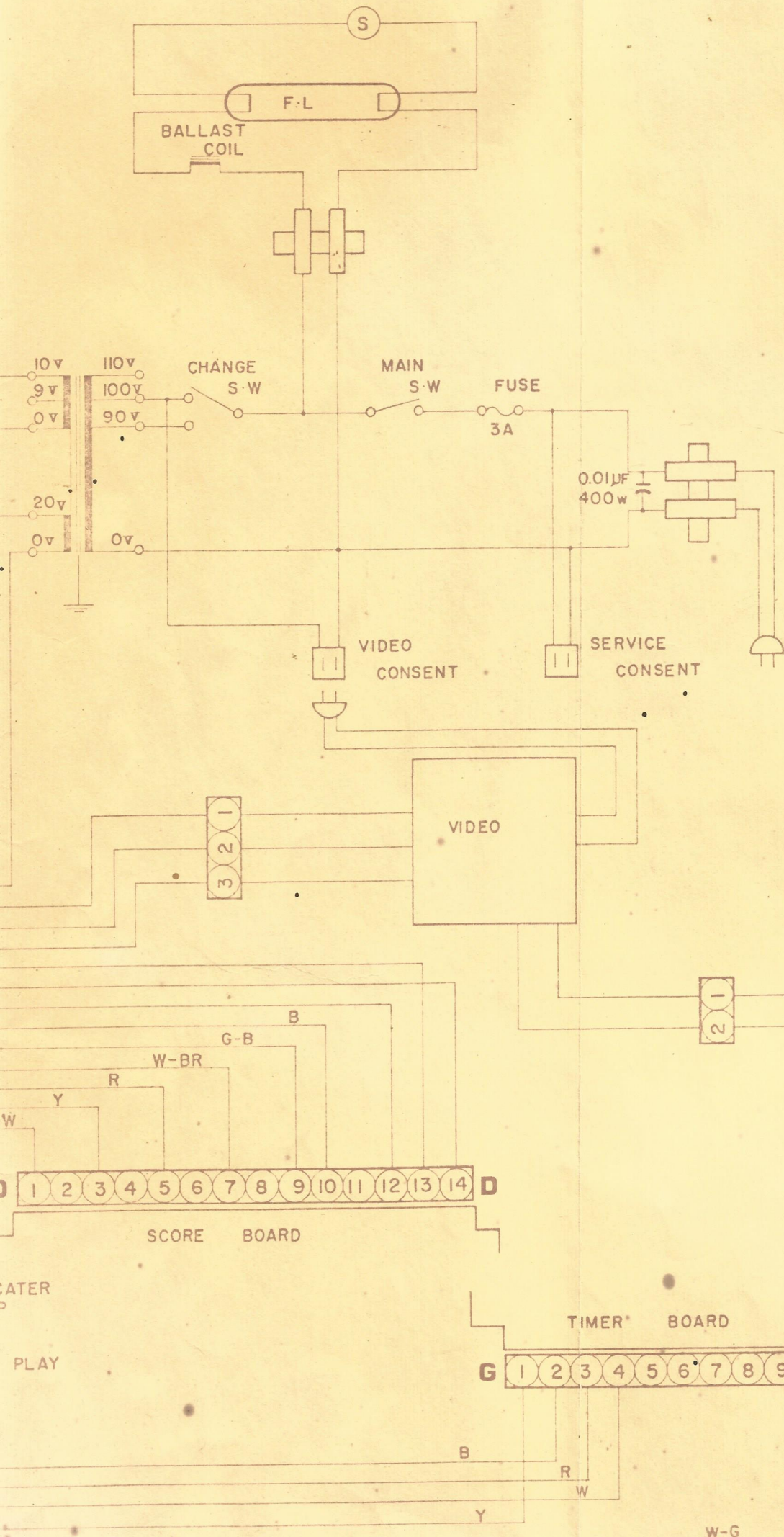




# SPEED RACE







B	BLACK	
B-W	BLACK	WHITE
R	RED	
R-W	RED	WHITE
R-B	RED	BLACK
W	WHITE	
W-B	WHITE	BLACK
W-BL	WHITE	BLACK
W-R	WHITE	RED
W-P	WHITE	PINK
W-BR	WHITE	BROWN
W-G	WHITE	GREEN
W-S	WHITE	SKY BLUE
BL	BLUE	
BL-B	BLUE	BLACK
BL-BR	BLUE	BROWN
O	ORANGE	
BR	BROWN	
BR-W	BROWN	WHITE
Y	YELLOW	
Y-W	YELLOW	WHITE
P-B	PINK	BLACK
G-B	GREEN	BLACK
SH	SHIELD	WIRE